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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,705

10/27/2005

Hiroyasu Taguchi

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EXAMINER

BASTIANELLI, JOHN

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

02/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/554,705	Applicant(s) TAGUCHI ET AL.	
	Examiner John Bastianelli	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Borland et al. US 5,474,104.

Borland discloses an apparatus having a sealing part and/or a gas contacting part 66 or 42, which has a halogen-free polyimide resin (Vespel is a polyimide and does not cite having halogen thus is seen as halogen-free (see cited Graham et al. US 6,111,329 that states "polyimides are known for their...halogen-free structure)) and a sealing part, which comprises a sealing part body 66 or 42 and an abutting material 70 or 54 capable of imparting sealing property by abutting against said sealing part body, wherein said sealing part body has a halogen-free resin, and at least the abutting part against the sealing part body of said abutting material comprises a stainless steel. The halogen-free resin is a polyimide resin (Vespel is a polyimide) which inherently has a Rockwell surface hardness of R30-R150, it has a cylinder valve 60 or 40, a pressure regulator 40, a flow controller 60 or 40, a line filter 34, and a line valve 60 or 40. The method is seen as practiced by the apparatus as it does not deteriorate the gas purity.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaver et al. US 5,149,105 in view of Borland et al. US 5,474,104.

Beaver discloses an apparatus having a sealing part and/or a gas contacting part 56, which has a halogen-free resin and a sealing part, which comprises a sealing part body 56 and an abutting material 22 capable of imparting sealing property by abutting against said sealing part body, wherein said sealing part body has a halogen-free resin, and at least the abutting part against the sealing part body of said abutting material comprises a stainless steel, a cobalt alloy, a highly corrosion-resistant nickel alloy or a ceramic selected from the group consisting of alumina, aluminum nitride and silicon carbide (col. 3, line 66-col. 4, line 10). Beaver lacks the halogen-free resin made of polyimide.

Borland discloses the halogen-free resin made of Vespel which is a polyimide. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the resin of Beaver out of Vespel as disclosed by Borland in order to make the valve more corrosion resistant, high thermal resistance, and non-flammable due to being halogen-free. Vespel is a resin which inherently has a Rockwell surface hardness of R30-R150. Beaver discloses a cylinder valve, a pressure regulator 40, a flow controller, and a line valve. The method is seen as practiced by the apparatus and

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is used to for flow of hazardous/corrosive materials which ammonia is. Beaver lacks a line filter. Borland discloses a line filter 34. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the line filter as disclosed by Borland in the valve of Beaver in order to remove contaminants from the fluid.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borland et al. US 5,474,104 in view of Floh et al. US 2004/0045605.

Borland lacks ammonia gas as the fluid. Floh discloses the fluid being ammonia gas. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the fluid of Borland with ammonia gas as disclosed by Floh in order to be able to safely valve a variety of fluids.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beaver et al. US 5,149,105 in view of Borland et al. US 5,474,104 in view of Floh et al. US 2004/0045605.

Beaver discloses flow of hazardous/corrosive fluids but lacks specifically ammonia gas as the fluid. Floh discloses the fluid being ammonia gas. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the fluid of Borland with ammonia gas as disclosed by Floh in order to be able to safely valve a variety of fluids.

Response to Arguments

7. Applicant's arguments filed December 19, 2008 have been fully considered but they are not persuasive. Borland clearly discloses a halogen-free polyimide resin (VespeI). This clearly meets applicant's claim language. Polyimide has the same characteristics no matter what it is used apparatus it is used in.

8. In response to applicant's argument that applicant's apparatus is for feeding an ammonia gas, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., metal corrosion due to a dehalogenation reaction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (571) 272-4921. The examiner can normally be reached on M-Th (8-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Bastianelli

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Primary Examiner
Art Unit 3753

/John Bastianelli/
Primary Examiner, Art Unit 3753